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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/707,766	11/08/2000	Mitchell S. Steiner	P-2769-US6	9946

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EXAMINER
FUBARA, BLESSING M

ART UNIT	PAPER NUMBER
1615	#5

DATE MAILED: 02/21/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/707,766	STEINER ET AL.	
	Examiner	Art Unit	
	Blessing M. Fubara	1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *1* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1 and 7-25 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for treating prostate cancinogenesis, does not reasonably provide enablement for "preventing" prostate cacinogenesis. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims.

The asserted utility is not believable on its face. It is not known how a method wherein a composition is claimed can be administered to prevent prostate cancer that may have started proliferating. It is not known how the occurrence of a pending cancer of the prostate can be precisely predicted in a subject as to when and how the cancer will occur and to administer the claimed composition to prevent the occurrence.

For rejections under 35 U.S.C. 112, first paragraph, the following factors must be considered (In re Wands, 8 USPQ2d 1400, 1404 (CAFC, 1988):

1) Breadth of claims.

2) Nature of invention.

3) State of prior art.

4) Level of ordinary skill in the art.

5) Level of predictability in the art.

6) Amount of direction and guidance provided by the inventor.

7) Existence of working examples

8) Quantity of experimentation needed to make or use the invention based on the content of the disclosure.

The present invention is in the field of treating prostate cancer with chemicals.

The state of the art is what prior art knows about the invention. There is no known art wherein a certain composition is administered to successfully prevent cancer before the occurrence.

The level of ordinary skill is high but only in the art of treating prostate cancer. The predictability or lack thereof in the art refers to the ability of one skilled in the art to extrapolate the disclosed or known results to the claimed invention. The lower the predictability, the higher the direction and guidance that must be provided by the applicants. In the instant invention the predictability is very low and consequently, the need for the higher levels of direction and guidance by the applicants. However, the amount of direction and guidance provided by the applicants is limited to treatment. There is no evidence in the specification that established correlation between the experiment and the claimed utility. See Ex parte Mass, 9 USPQ2d 1746, 1987. The quantity of experimentation required to use the method as claimed in the instant invention, based on applicants' disclosure would be undue burden because, one of ordinary skill in the art would have to perform significant amount of in-vivo experiments as well as assays.

Claims 1-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "analog" in claims 1-6 is a relative term which renders the claim indefinite. The term "analog" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

4. The term "derivative" in claims 1-6 is a relative term which renders the claim indefinite. The term "derivative" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Objections

5. Claim 7 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 7 depends from claim 8.

6. Claims 7-25 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. See MPEP § 608.01(n).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeGregorio et al. (US 5,491,173) in view of Swindell et al. (US, 6,080,877).

Toivola discloses anti-estrogenic agents wherein toremifene, metabolites of toremifene, non-toxic pharmaceutically acceptable salts and esters of the anti-estrogenic agents and mixtures thereof are administered parenterally, intravenously or orally in an effective amount for their anti-tumor activity, particularly estrogen dependent tumor (abstract and column 13, lines 40-58). Toivola teaches pharmaceutical compositions of the anti-estrogenic agents in pharmaceutical dosage forms of tablets, capsules, suppositories, solutions, powders and emulsions wherein the pharmaceutical compositions further comprises pharmaceutically acceptable carriers. Liquid carriers include water, syrup, peanut oil and olive oil; the solid carriers include lactose, sucrose, gelatin and agar. See column 13, line 59 to column 14, and 24 and claims 8-10. However, Toivola is silent on prostate cancer.

Swindell teaches toremifene as one of the anticancer drugs effective for treating prostate cancer (column 23, line 18 to column 24, and line 3, column 5, line 63, column 6, line 50, and column 7, line 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teachings of Toivola in the manner taught by Swindell. One having ordinary skill in the art would have been motivated to administer the composition of Toivola to treat cancer or tumor since Swindell teaches toremifene, an antiestrogen as an effective drug for treating prostate cancer.. Administering a specified amount of drug for treating a condition is an optimization of working conditions, which is not critical to the prior art in the absence of a showing.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Jalonen et al. (US 5,571,534) teaches pharmaceutical formulations of toremifene, desmethyl toremifene, tamoxifen and desmethyltamoxifen anti-estrogens wherein the formulation is parenteral and comprises emulsions, liposomes or aqueous solutions of cyclodextrin-drug complexes (abstract, and column 2, lines 40-59). Jolonen et al. failed to teach prostate cancer.

DeGregorio et al. (US 5,605,700) discloses transdermal formulation comprising toremifene and its metabolites or pharmacologically acceptable salts for topical administration for treating cancer (abstract). The transdermal formulation of DeGregorio further comprises pharmaceutical acceptable carriers and optional penetration enhancers that mix with the toremifene and its metabolites or pharmacologically acceptable salts to form ointments, emulsions, lotions, solutions, creams or gels (column 2, lines 28-36). The transdermal formulation of DeGregorio also comprises excipients wherein the excipients are DMSO, vegetable and animal oils, non-volatile fatty alcohols, ethanol, isopropanol, glycols, glycol

ethers, polyethylene glycol, propylene glycol, glycerol, glycerol ethers, methylcellulose, carboxymethyl cellulose, and sorbitan stearate or polysorbate 60 as emulsifying agents (column 2, lines 39-49). DeGregorio fails to teach prostate cancer.

The 1999 Physician Desk Reference discloses a pharmaceutical formulation, by Schering-Plough Corporation, comprising toremifene citrate, starch, lactose, povidone, sodium, starch glycolate, magnesium stearate, microcrystalline cellulose and colloidal silicon dioxide in 60 mg tablet dosage form for treating breast cancer (page 2842-2843, 1999 PDR).

Double Patenting

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. Claims 1-25 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-19 of U.S. Patent No. 6,265,448. Although the conflicting claims are not identical, they are not patentably distinct from each other because the difference between the issued patent and the application is that the issued patent does not recite analog, derivative or isomer of the antiestrogenic drug. But derivatives, isomers or analogs of

antiestrogens are also antiestrogens that one of ordinary skill in the art would experiment with for treating cancer of the prostate since the issued patent teaches a method for treating prostate cancer by administering antiestrogen having the structure taught in claim 1.

12. Claims 1-25 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-22, 19 and 21-53, 19-35, 20-36 and 20-39 of copending Application Nos. 09/306,958; 09/531,472; 09/660,184; 09/660,191; and 09/660,197 respectively. Although the conflicting claims are not identical, they are not patentably distinct from each other because like the instant application, all the co-pending applications listed above teach method of treating or suppressing or inhibiting prostate cancer or pre-malignant lesions of prostate cancer or latent prostate cancer with antiestrogens or toremifene, an antiestrogen or analog or metabolite of antiestrogen.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

13. Applicants' cooperation is requested in correcting any errors of which applicants may become aware in the specification and in the claims.

Examiner respectfully requests of applicants to provide copies of the allowed claims in the copending applications and copies of the non-patent literature cited in the PTO 1449.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blessing M. Fubara whose telephone number is 703-308-8374. The examiner can normally be reached on 7 a.m. to 3:30 p.m. (Monday to Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K. Page can be reached on 703-308-2927. The fax phone numbers for the

organization where this application or proceeding is assigned are 703-305-3592 for regular communications and 703-305-3592 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1234.

Blessing Fubara
February 20, 2002

THURMAN K. PAGE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600